CIRCULATION RESEARCH

A new bimonthly scientific journal, CIRCULATION RESEARCH, the only publication devoted exclusively to reports on fundamental studies related to the heart and circulation, will be issued by the American Heart Association as a further step in the development of its professional education program. Announcement of the new journal was made jointly by Dr. Irving S. Wright, President of the Association and Chairman of its Publications Committee, and Mr. Henry M. Stratton, President of Grune & Stratton, Inc., New York medical publishers who also publish CIRCULATION, a monthly journal of the American Heart Association. The first issue of the new publication will appear in January 1953.

In announcing the new periodical, Dr. Wright said, “In a period of little over two years, CIRCULATION, as the official journal of the American Heart Association, has achieved a high position of recognition and respect among readers in the field of cardiovascular problems throughout the world. Because of the growing interest in the basic sciences and the limited space available for reports in this area, it was generally felt that the point had been reached where an entirely new publication, to be known as CIRCULATION RESEARCH, should be issued. We are confident this new journal will be welcomed by the many physicians, investigators, and teachers who have long felt the need for an effective medium to integrate and disseminate new knowledge regarding fundamental problems which must first be solved before applied research can progress.”

CIRCULATION RESEARCH will be edited by Dr. Carl J. Wiggers, Professor and Director, Department of Physiology, Western Reserve University School of Medicine, Cleveland. Dr. Robert S. Alexander, Associate Professor of Physiology at the same institution, will be Assistant Editor.

CIRCULATION, which is in its third year of publication, will continue as a separate journal under the editorship of Dr. Thomas M. McMillan, Philadelphia. It will concentrate more fully on clinical problems and applied research, as distinguished from fundamental research in the cardiovascular field.

The editor of the new bimonthly, Dr. Wiggers, expressed the hope that CIRCULATION RESEARCH would become “the medium for the best in various disciplines of fundamental research that may throw light on cardiovascular problems. These would include anatomic, biologic, biochemical, biophysical, morphologic, pathologic, physical, physiologic, and pharmacologic aspects, regardless of whether they emerge from laboratories of these basic disciplines or from clinical divisions.”

Since research acquires its full importance only after publication, the new journal will aim to narrow the gap between the completion of a discovery and its publication in the scientific literature.

In addition to original papers on fundamental
research, editorials on appropriate subjects and short preliminary reports on "research in progress" will be included. For the present, the new publication will not include reviews or abstracts. Manuscripts will be considered for publication after October 1, 1952. They should be addressed to Dr. Carl J. Wiggers, Editor, Circulation Research, 2109 Adelbert Rd., Cleveland, Ohio.

The editorial board includes the following: Alan C. Burton, Ph.D., University of Western Ontario, Faculty of Medicine, London, Ont.; Jefferson M. Crisman, M.D., Stanford University, Stanford, Calif.; Joseph E. Flynn, M.D., Columbia University College of Physicians and Surgeons, New York City; Harry Goldblatt, M.D., Institute for Medical Research, Los Angeles; Donald E. Gregg, Ph.D., M.D., Army Medical Service Graduate School, Washington, D. C.; William F. Hamilton, Ph.D., Medical College of Georgia, Augusta, Ga.; Alrick B. Hertzman, Ph.D., St. Louis University School of Medicine; Louis N. Katz, M.A., M.D., Michael Reese Hospital, Chicago; Charles E. Kossmann, M.D., Sc.D., New York University College of Medicine, New York City; Hampden C. Lawson, M.D., Ph.D., University of Louisville, Louisville, Ky.; Victor Lorber, M.D., Ph.D., School of Medicine, University of Minnesota, Minneapolis; Irvine H. Page, M.D., Cleveland Clinic Foundation, Cleveland; Otto H. Schmitt, Ph.D., University of Minnesota; Eugene A. Stead, M.D., Duke University, Durham, N. C.; Albert Szent-Gyorgyi, Ph.D., M.D., Marine Biological Laboratory, Woods Hole, Mass.

Circulation Research will have a format similar to that of Circulation. Each volume will consist of approximately 600 pages.

In order to encourage the widest possible readership, subscription rates have been set below publication cost. The American Heart Association will assume the difference in line with its policy of bringing to the medical profession knowledge of the latest scientific advances. Complete information about subscription rates will be published in the next issue of Circulation.

COOPERATIVE RHEUMATIC FEVER STUDY

Early in 1951 an international study of the treatment of rheumatic fever was set up with the object of measuring the relative values of ACTH, cortisone, and aspirin. This cooperative study, first of its kind in this field, is being conducted in 13 research centers in the United States, Great Britain, and Canada by the American Heart Association's Council on Rheumatic Fever in conjunction with the British Medical Research Council.

A preliminary report of the findings was made by a panel of investigators engaged in the study at a joint scientific session of the Council on Rheumatic Fever and the American Rheumatism Association in Chicago on June 7, 1952. A summary statement was presented by the moderator for the panel, David D. Rutstein, M.D., Boston, Chairman of the Committee on Criteria and Standards of the Council on Rheumatic Fever.

The text of the statement is as follows:

"A group of investigators in the United Kingdom, Canada and the United States initiated in January 1951 a cooperative study on the relative value of ACTH, cortisone and salicylates in the treatment of rheumatic fever and the prevention of rheumatic heart disease. The plan of study provides for uniform criteria for the diagnosis of rheumatic fever and for the degree of rheumatic activity required for the admission to the study, the random allocation of patients to the three treatment groups, a defined dosage schedule of the drugs for a fixed period of time, a specified period of observation following treatment and a long-term follow-up schedule. It also lays down precisely the frequency and type of clinical and laboratory observations to be carried out on each patient.

"To date, in all three countries, 658 cases have been admitted to the study and the analysis of rather less than half of these is the basis of the preliminary report. These cases were analyzed for changes in those symptoms, signs and laboratory observations usually considered important in evaluating the course of acute rheumatic fever. In the type of cases admitted
to the trial and with the regime of treatment laid down, it appears that individual symptoms, signs or laboratory observations may have been affected more favorably by one or another of these three drugs, but no consistent pattern is evident. In short, no firm conclusions can at present be drawn concerning the drug most effective in the control of the acute illness. The cases have not been under observation sufficiently long to provide data on the prevention of rheumatic heart disease.

"Admission of new cases to the study will be brought to an end later this year. It is anticipated that a total of 750 cases will be available in all three countries for complete and detailed analysis of the effects of the drugs on the acute course of the disease and later, after adequate follow up, on the prevention of rheumatic heart disease."

The investigators who participated in the panel included: Professor A. Bradford Hill and Dr. Eric G. L. Bywaters, representing the British investigating centers; Dr. Albert Dorfman, La Rabida Jackson Park Sanitarium, Chicago; Dr. Edward E. Fischel, College of Physicians and Surgeons, Columbia University, New York; Dr. James E. Flett, Jr., Denver General Hospital, Denver, Colorado; Dr. John D. Keith, Hospital for Sick Children, Toronto, Canada; Dr. Currier McEwen, New York University-Bellevue Medical Center, New York; Dr. Benedict F. Massell, House of the Good Samaritan, Boston; Dr. Charles H. Rammekamp, Francis E. Warren Air Force Base, Cheyenne, Wyoming; and Miss Marjorie T. Bellows, American Heart Association, New York City.

Funds for the study are being supplied by the National Heart Institute of the U.S. Public Health Service, the British Medical Research Council, the hospitals and medical centers in the local communities involved in the study, the Armed Forces Epidemiological Board, the United States Air Force, the American Heart Association, and the Canadian Arthritis and Rheumatism Society. The supply of ACTH required for the study was given by Armour and Company, and the cortisone supply was given by Merck and Company.

1953 ANNUAL MEETING

The 1953 Annual Meeting of the American Heart Association will be held in Atlantic City, April 8 to 12. It will once again precede the Annual Meeting of the American College of Physicians, which will be held in the same city.

SPECIAL COMMENDATION

Special Commendation was given by the Committee on Awards of the American Medical Association’s Council on Scientific Assembly to the Exhibit Symposium and Question-and-Answer Conferences on Cardiovascular Disease, conducted as a special feature of the Scientific Exhibit held in Chicago, June 9 to 13. The Symposium and Question-and-Answer Conferences were presented with the cooperation of the American, Illinois, and Chicago Heart Associations. Because of the success of the Question-and-Answer sessions, which were well attended, the Association is considering a repetition of this feature at the 1953 American Medical Association meeting in New York City.

BOARD OF DIRECTORS

William H. Bunn, M.D., Youngstown, Ohio, has been re-elected Secretary of the Board of Directors, and Harry E. Ungerleider, M.D., New York City, has been re-elected Assistant Secretary.

SCIENTIFIC COUNCIL. OFFICERS

In addition to Louis X. Katz, M.D., Chicago, immediate Past-President of the Association, Scientific Council, the officers for the current year are: Frank N. Wilson, M.D., Stockbridge, Mich., who has been re-elected Vice-Chairman; and Lowell A. Rantz, M.D., San Francisco, who has been re-elected Secretary.

COUNCIL FOR HIGH BLOOD PRESSURE RESEARCH

Alva Bradley, Cleveland, has been re-elected President of the Association’s Council for High Blood Pressure Research. E. V. Allen, M.D., Mayo Clinic, Rochester, Minn., has been chosen Chairman of the Council’s Medical Advisory Board, and George E. Wakerlin, M.D., University of Illinois, Chicago, has been named Vice-Chairman.
COUNCIL ON RHEUMATIC FEVER

The Council on Rheumatic Fever and Congenital Heart Disease has elected John P. Hubbard, M.D., Philadelphia, as its Chairman, and Francis F. Schwentker, M.D., Baltimore, as Vice-Chairman.

SECTION ON CIRCULATION

Nelson W. Barker, M.D., Rochester, Minn., has been elected Chairman of the Section on Circulation. George E. Burch, M.D., New Orleans, was named Vice-Chairman, and Grace M. Roth, Ph.D., Rochester, Minn., was re-elected Secretary-Treasurer.

INTERNATIONAL CARDIOLOGY CONGRESS

The Scientific Council has adopted, and the Board has approved, a resolution that Dr. Paul D. White, Boston, be nominated President of the Second International Congress of Cardiology. Dr. White is Chairman of the Association’s Committee on International Affairs.

The Congress will be held in the United States in 1954, beginning Sunday, September 12 through Saturday, September 18. The opening session will be held in Washington, D.C., followed by several days of Scientific Sessions in Washington and in Bethesda, Md. Clinical demonstrations and other exercises are to be planned in various cities, including Baltimore, Philadelphia, New York, and Boston during the latter half of the week, and in cities in the Mid-west including Cleveland, Chicago, St. Louis, Rochester, and Minneapolis, during the following week. There will be optional visits to the western cities and Canada.

REGIONAL CONFERENCES

Six regional conferences have been scheduled by the Association during September and October for Board, Committee, and staff representatives of affiliates and chapter heart associations in 36 states and the District of Columbia. These conferences help to clarify for lay and medical representatives the role and function of their respective heart associations in furthering the objectives of the American Heart Association’s threefold program of research, education, and community services.

Following is the complete schedule of conferences:

September 17 and 18, at East Northfield, Mass.—including representatives from Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont.

September 23 and 24, at Baltimore—including representatives from Delaware, Maryland, New Jersey, Pennsylvania, Virginia, Washington, D.C., West Virginia.

October 1 and 2, at New Orleans—including representatives from Alabama, Arkansas, Louisiana, Mississippi, Texas, Oklahoma.

October 6 and 7, at Atlanta—including representatives from Florida, Georgia, North Carolina, South Carolina, Tennessee.

October 9 and 10, at Indianapolis—including representatives from Illinois, Indiana, Kentucky, Michigan, Ohio, Wisconsin.

October 27 and 28, at Kansas City, Mo.—including representatives from Colorado, Iowa, Kansas, Minnesota, Missouri, Nebraska, South Dakota.

TRAINING INSTITUTE

To assist staffs of affiliate and chapter heart associations to fulfill their responsibilities, the Association has organized a training course to be held in New York City, September 2 to 12, at the Henry Hudson Hotel. In addition to lectures and group discussions, individual conferences will be held with members of the national staff.

PROGRAM GUIDE

The Association’s new Program Guide has been distributed to affiliates and chapters. The manual sets out basic principles and outlines technics to enable heart associations to build a program in the field of cardiovascular diseases that will correspond to the needs of the people in the community.

RESEARCH FELLOWSHIPS—AMERICAN COLLEGE OF PHYSICIANS

The American College of Physicians announces that a limited number of Fellowships in Medicine will be available from July 1, 1953 to June 30, 1954. These Fellowships are designed to provide an opportunity for research training.
either in the basic medical sciences or in the application of these sciences to clinical investigation. They are for the benefit of physicians who are in the early stages of their preparation for a teaching and investigative career in Internal Medicine. The stipend will be from $3,000 to $3,500. Application forms will be supplied on request to The American College of Physicians, 4200 Pine Street, Philadelphia 4, Pennsylvania, and must be submitted in duplicate not later than October 1, 1952. Announcement of awards will be made November, 1952.

CALENDAR
Aug. 31–Sept. 6—Fourth Inter-American Cardiological Congress, Buenos Aires, Argentina. Contact: Dr. Blas Moia, IV Congreso InterAmericano, Larrea No. 1132, Buenos Aires.
"SINE QUA NON"
IN TREATMENT OF CARDIORESPIRATORY DISEASES

SEARLE
AMINOPHYLLIN*
MYOCARDIAL STIMULANT, DIURETIC, BRONCHIAL RELAXANT

cardiac edema • bronchial asthma • status asthmaticus • Cheyne-Stokes respiration • pulmonary edema • paroxysmal dyspnea of congestive heart failure

AMPULS • POWDER • TABLETS • SUPPOSICONES®
*Contains at least 80 per cent of anhydrous theophylline.
Two significant books on Diagnostics... 
and what reviewers say of them—

FUNDAMENTALS OF CLINICAL FLUOROSCOPY
With Essentials of Roentgen Interpretation 
(Third printing) • Charles B. Storch, M.D.

Circulation: "A lucid style supplemented by outstanding illustrations, many of 
which are original and ingenious teaching aids of the author, make this text... re-
quired reading for anyone preparing for the performance of fluoroscopic examina-
tions."

Ann. Internal Med.: "... highly recommended ... will prove valuable reading 
for medical students, interns and residents ... specialists and the general practi-
tioner."

Bull. Johns Hopkins Hosp.: "... well illustrated and easy to read ... definitely 
a welcome aid to ... those wishing to study the elements of fluoroscopic exami-
nations."

Ohio State J. Med.: "... a practical and comprehensive manual—fully illustrated—
on [fluoroscopy's] basic diagnostic aspects. The only book of its kind that we know 
of and certainly one for which many physicians have been looking."

Am. J. Digest. Dis.: "... merits the attention of everyone doing diagnostic x-ray 
work, but it will prove particularly valuable—even indispensable—to the internist 
or general practitioner who attempts to do his own radiological investigations."

DIFFERENTIAL DIAGNOSIS OF INTERNAL DISEASES: Clinical Analysis and Synthesis of Symptoms 
and Signs • Julius Bauer, M.D.

Circulation: "It is clearly the work of a master clinician who has matured and who 
knows, as does every seasoned clinician, that the successful rehabilitation of ailing 
patients often requires more of the art than the science of medicine ... The book 
is well written, well printed and is a veritable storehouse of information in the field 
of differential diagnosis [and as such] will make a valuable addition to the internist's 
library."

Ann. Internal Med.: "This book can be highly praised. The author has combined 
with his individual approach to each subject in turn an extraordinary display of 
knowledge ... healthy attitudes pervade the well written text, which is amply 
illustrated with numerous case reports. [It] is an education to read and will remain 
an invaluable work of reference."

Pennsylvania Med. J.: "... learned and comprehensive ... recommended."

Southern Med. & Surg.: "This review copy will be kept by the reviewer as his very 
own, and appealed to daily."
Order these
BINDERS
For Your Issues of
Circulation

VOLUMES III and IV, 1951
VOLUMES V and VI, 1952

Red Cloth
Leather Pattern
Stamped in Gold on
Black Panel.

The binders are designed to fit snugly around
the six issues forming a volume. Order binders for Volumes V and VI now, insert
the issues of CIRCULATION as they are published each month. Keep the issues
as they are, with cover and advertising section; front matter and index are supplied
with the last issue of each volume. The binders are made particularly for physicians
who like to keep the issues of a volume together without going to the trouble and ex-
 pense of having the volume bound.

Binders are $1.50 each.

Use the handy order form on the left.

ORDER FORM
Grune and Stratton, Inc.
381 Fourth Avenue, New York 16, N. Y.

Please send me the binders for CIRCULATION:
Volume III □ $1.50  Volume V □ $1.50
Volume IV □ $1.50  Volume VI □ $1.50

for which my check is enclosed.

NAME........................................................................
ADDRESS....................................................................
Now another important advantage of Thiomerin:

Suitability for Home Administration

The self-injection of the thionated mercurial diuretic, Thiomerin, has now become a well-established procedure for patients who have congestive heart failure, just as the self-injection of insulin has long been a well-established procedure for patients who have diabetes.

Numerous authorities recommend Thiomerin for home administration because it is as well tolerated and predictable in effect when given subcutaneously, as when given intramuscularly and intravenously. The technique of injecting Thiomerin Sodium may be quickly mastered.

Consequently, more and more physicians are finding that it is often desirable to instruct the patient or a member of his family in the use of Thiomerin so that injections between visits can be made on schedule—according to the dosage plan that best suits each patient.

A supply of printed instructions for patients will be sent to the physician on request.

Thiomerin
Sodium
Mercaptomerin Sodium Wyeth

Council-Accepted Mercurial Diuretic for Subcutaneous, Intramuscular or Intravenous Injection

References:
in acute or severe congestive failure

The importance of MERCUHYDRIN Sodium in relieving the "drowning" heart has made it a fulcrum of the therapeutic regime in acute or severe congestive failure. In pulmonary edema or paroxysmal nocturnal dyspnea, the prompt, effective action of MERCUHYDRIN may be a life-saving measure, as demonstrated by extensive clinical experience.

Unexcelled for draining edematous tissues, well tolerated locally and systemically, MERCUHYDRIN is an agent of choice for initiating diuretic therapy.

MERCUHYDRIN Sodium (brand of meralluride sodium) is available in 1-cc and 2-cc ampuls and 10-cc vials.
CONTENTS

STUDIES ON THE SPREAD OF EXCITATION THROUGH THE VENTRICULAR MYOCARDIUM. II. THE VENTRICULAR SEPTUM
Howard B. Burchell, Hiram E. Essex and Raymond D. Pruitt 161

EFFECTS OF CARDIAC GLYCOSIDES UPON THE ELECTRICAL ACTIVITY OF SINGLE VENTRICULAR FIBERS OF THE FROG HEART, AND THEIR RELATION TO THE DIGITALIS EFFECT OF THE ELECTROCARDIOGRAM
Lovell A. Woodbury and Hans H. Hecht 172

STUDIES OF ELECTROCARDIOGRAPHIC CHANGES DURING EXERCISE (MODIFIED DOUBLE TWO-STEP TEST) ............ Paul N. G. Yu and Alfred Soffer 183

TRANSIENT VENTRICULAR FIBRILLATION. IV. THE EFFECTS OF ProCAINE AMIDE ON PATIENTS WITH TRANSIENT VENTRICULAR FIBRILLATION DURING ESTABLISHED AURICULOVENTRICULAR DISSOCIATION
Sidney P. Schwartz, Leonard Hallinger and Anthony Imperialli 193

THE DISTRIBUTION OF CARDIAC POTENTIALS AROUND THE CHEST IN ONE HUNDRED AND THREE NORMAL MEN ....... Ernst Simonson 201

CLINICAL STUDIES ON VERATRUM ALKALOIDS. II. THE DOSE-RESPONSE RELATIONS OF PROTOVERATRINE IN HYPERTENSION ... Edward Meilman and Otto Krayer 212

THE LEWIS A. CONNER MEMORIAL LECTURE. THE HEART AND THE THYROID: WITH PARTICULAR REFERENCE TO 11° TREATMENT OF HEART DISEASE
Herrman L. Blumgart and A. Stone Freedberg 222

THE ACTION OF NOREPINEPHRINE, EPINEPHRINE AND ISOPROPYL NOREPINEPHRINE ON THE RHYTHMIC FUNCTION OF THE HEART
Morris H. Nathanson and Harold Miller 238

HYPERSENSITIVITY TO MERCUHYDRIN . John F. Whitman and William L. Proudfoot 245

PARADOXIC ACTION OF AMYL NITRITE IN CORONARY PATIENTS
Stephen Contro, Olga M. Haring and Walter Goldstein 250

ACCELERATION OF BLOOD COAGULATION IN ACUTE MYOCARDIAL INFARCTION AS DEMONSTRATED BY THE HEPARIN CLOTTING TIME; EFFECT OF DICUMAROL THERAPY ............. Robert L. Rosenthal and John C. Weaver 257

FURTHER STUDIES ON THE EFFECT OF ARTERIOVENOUS FISTULAS AND ELEVATION OF SINUS PRESSURE ON MORTALITY RATES FOLLOWING ACUTE CORONARY OCLUSIONS
George Smith, James Demming, Morton Eleff and Richard W. Eckstein 262

FURTHER OBSERVATIONS ON PENICILLIN-TREATED CARDIOVASCULAR SYPHILIS.
Joseph Edieken, William T. Ford, Mortimer S. Falk and John H. Stokes 267

THE INHIBITION OF CORONARY ATHEROSCLEROSIS BY ESTROGENS IN CHOLESTEROL-FED CHICKS ............. R. Pick, J. Stamler, S. Rodbard and L. N. Katz 276


CLINICAL PROGRESS. HYPERTENSION AND THE PROBLEM OF VASCULAR HOMEOSTASIS
Irvine H. Page and A. C. Corcoran 286

ABSTRACTS .......... 293
BOOK REVIEWS .......... 313
AMERICAN HEART ASSOCIATION .......... 316